

BRANZ Appraised Appraisal No. 683 [2022]

# SMARTCLAD™ BEVELBACK WEATHERBOARD DIRECT FIXED CLADDING SYSTEM

Appraisal No. 683 (2022)

This Appraisal replaces BRANZ Appraisal No. 683 (2017)

#### **BRANZ Appraisals**

Technical Assessments of products for building and construction.



#### **PurePine Mouldings**

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#### BRANZ

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## Product

- 1.1 The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System is an external wall cladding system for residential and light commercial type buildings where domestic construction techniques are used. The system utilises the SmartClip™ fixing clip to aid speed of installation.
- 1.2 The system consists of horizontally fixed SmartClad™ Bevelback timber weatherboards, flashings and accessories.
- 1.3 The system is applied direct to the external wall framing over a wall underlay and is finished with a 100% premium acrylic house paint.

## Scope

- 2.1 The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System has been appraised as an external horizontally fixed wall cladding system for buildings within the following scope:
  - the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
  - constructed with timber framing complying with the NZBC; and,
  - with a risk score of 0-12, calculated in accordance with NZBC Acceptable Solution E2/AS1, Table 2; and,
  - situated in NZS 3604 Wind Zones up to, and including, Very High.
- 2.2 The SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System is appraised for use with aluminium window and door joinery that is installed with vertical jambs and horizontal heads and sills. (*Note: The Appraisal of the SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System relies on the joinery meeting the requirements of NZS 4211 for the relevant Wind Zone*).



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## **Building Regulations**

### New Zealand Building Code (NZBC)

3.1 In the opinion of BRANZ, the SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System, if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet the following provisions of the NZBC:

**Clause B1 STRUCTURE:** Performance B1.3.1, B1.3.2 and B1.3.4. The SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System meets the requirement for loads arising from self-weight, wind, impact and creep [i.e. B1.3.3 (a), (h), (j) and (q)]. See Paragraphs 9.1–9.3.

**Clause B2 DURABILITY:** Performance B2.3.1 (b) 15 years, B2.3.1 (c) 5 years and B2.3.2. The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System meets these requirements. See Paragraphs 10.1-10.4.

**Clause E2 EXTERNAL MOISTURE:** Performance E2.3.2. The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System meets this requirement. See Paragraphs 14.1-14.3.

**Clause F2 HAZARDOUS BUILDING MATERIALS:** Performance F2.3.1. The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System meets this requirement.

# **Technical Specification**

4.1 System components and accessories supplied by PurePine Mouldings Limited are as follows:

#### SmartClad™ Weatherboards

- The SmartClad™ Bevelback weatherboards are manufactured from New Zealand radiata pine. They are finger-jointed with a one-pot polyurethane adhesive. The boards are treated to Hazard Class H3.1. The weatherboards are supplied factory coated with one coat of a premium timber primer on the front and back face and top and bottom edges, and are beige in colour.
- The weatherboard profiles are in accordance with BRANZ Bulletin 411. The weatherboards are 18 mm thick and are available in 140 mm and 185 mm widths. They are supplied in 6 m lengths.
- A 30 mm thick SmartClad™ Starter Board is also available in 140 and 185 mm widths. They are supplied in 6 m lengths.

#### SmartClip™ and Fixings

- SmartClip<sup>™</sup> 40 x 10 mm ABS fixing clip.
- SmartClad™ Screws stainless steel 65 mm x 8 g, used in conjunction with the SmartClip™.

#### Accessories

- SmartClad<sup>™</sup> Pre-scribed Scriber 40 mm wide x 10 mm, or 40 mm x 18 mm pre-scribed scribers supplied in 5.4 m lengths.
- SmartClad™ Pre-scribed Facing 66 mm wide x 34 mm pre-cut facings supplied in 5.4 m lengths.
- SmartClad<sup>™</sup> Box Corner (2 piece) 100/88 mm x 34 mm box corner (2 piece) supplied in 5.4 m lengths.
- SmartClad™ Sill 55 x 42 mm plant-on sill section supplied in 5.4 m lengths.
- SmartClad™ Internal Corner Scriber 36 x 36 mm corner scriber, supplied in 5.4 m lengths.

[Note: All timber accessories are manufactured from finger jointed New Zealand radiata pine treated to Hazard Class H3.1. The accessories are supplied factory coated with two coats of premium timber primer on the front and back face and top and bottom edges, and are beige in colour].

• Joint Soakers and Corner Soakers - the soakers are available in galvanised steel or stainless steel. They are 150 or 200 mm high, 49 mm wide each side and with an 18.5 mm lip.



- 4.2 Accessories used with the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System, which are supplied by the building contractor are:
  - Flashings including external corner flashing, internal corner flashing, sill flashing, window and door head flashing. The flashings are to be galvanised steel, aluminium or stainless steel. Refer to NZS 3604, Section 4 and NZBC Acceptable Solution E2/AS1, Table 20 for durability requirements.
  - Flexible Wall Underlay building paper complying with NZBC Acceptable Solution E2/AS1, Table 23, or breather-type membranes covered by a valid BRANZ Appraisal for use as wall underlays.
  - Rigid Wall Underlay plywood or fibre cement sheet complying with NZBC Acceptable Solution E2/AS1, Table 23, or rigid wall underlay covered by a valid BRANZ Appraisal for use as rigid air barrier systems.
  - Flexible Sill and Jamb Flashing Tape flexible flashing tapes complying with NZBC Acceptable Solution E2/AS1, Paragraph 4.3.11, or flexible flashing tapes covered by a valid BRANZ Appraisal for use around window and door joinery openings.
  - Window and Door Trim Cavity Air Seal air seals complying with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.6, or self-expanding, moisture cure polyurethane foam air seals covered by a valid BRANZ Appraisal suitable for use around window, door and other wall penetration openings.
  - Flexible Sealant sealant complying with NZBC Acceptable Solution E2/AS1, or sealant covered by a valid BRANZ Appraisal for use as a weather sealing sealant for exterior use.
  - Eaves Moulding 40 x 27 mm clear grade, finger-jointed radiata pine treated to Hazard Class H3.1.
  - SmartClad<sup>™</sup> Starter Board fixings or SmartClad<sup>™</sup> Weatherboard to Framing [where SmartClip<sup>™</sup> screw fixing is not suitable e.g. top board] 75 x 3.15 mm hot-dip galvanised or stainless steel ring shank jolt head nails.
  - SmartClad™ Box Corner (2-piece), Pre-scribed Facings and SmartClad™ Sill (plant-on) Fixings - 75 x 3.15 mm hot-dip galvanised or stainless steel ring shank jolt head nails.
  - SmartClad™ Pre-scribed Scriber, Internal Corner Scriber and Eaves Moulding Fixings 60 x 2.8 mm hot-dip galvanised or stainless steel ring shank jolt head nails.

[Note: Hot-dip galvanising must comply with AS/NZS 4680 and stainless steel fixings must be Grade 316.]

#### **Paint System Specification**

- 4.3 Paint systems are not supplied by PurePine Mouldings Limited and have not been assessed by BRANZ and are therefore outside the scope of this Appraisal.
- 4.4 All exposed faces, including top edges at sills and all bottom edges of SmartClad<sup>™</sup> weatherboards and accessories must be finished with sufficient coats of an exterior grade latex acrylic paint complying with any of Parts 7, 8, 9 or 10 of AS 3730 to achieve a minimum wet film thickness of 150 microns. (Note: For SmartClad<sup>™</sup> Bevelback weatherboards, PurePine Mouldings Limited recommends using paint with a colour which has a light reflective valve (LRV) of greater than or equal to 45%.)

## Handling and Storage

- 5.1 Handling and storage of all materials supplied by PurePine Mouldings Limited or the building contractor, whether on-site or off-site, is under the control of the building contractor. SmartClad™ weatherboards must be stacked flat, clear of the ground by a minimum of 150 mm and supported on timber bearers at maximum 900 mm centres. They must be kept dry at all times either by storing within an enclosed building or when stored externally an additional secondary cover to the plastic wrapping is required. Care must be taken to avoid damage to edges, ends and the primed surfaces. Weatherboards must always be carried on edge.
- 5.2 Accessories must be stored so they are kept clean, dry and undamaged. All accessories must be used within the maximum storage period recommended by the manufacturer.



SMARTCLAD™ BEVELBACK WEATHERBOARD DIRECT FIXED CLADDING SYSTEM

## **Technical Literature**

- 6.1 This Appraisal must be read in conjunction with:
  - SmartClad™ Technical Manual, Version 10.15.
- 6.2 All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.

# **Design Information**

### Framing

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#### **Timber Treatment**

7.1 Timber wall framing behind the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System must be treated as required by NZBC Acceptable Solution B2/AS1.

#### **Timber Framing**

- 7.2 Timber framing must comply with NZS 3604 for buildings or parts of buildings within the scope limitations of NZS 3604. Buildings or parts of buildings outside the scope of NZS 3604 must be to a specific design in accordance with NZS 3603 and AS/NZS 1170. Where specific design is required, the framing must be of at least equivalent stiffness to the framing provisions of NZS 3604. In all cases, studs must be at maximum 600 mm centres. Dwangs must be fitted flush between the studs at maximum 800 mm centres.
- 7.3 In situations where the SmartClip™ cannot be used, such as gable ends, the boards may be conventionally nail fixed for buildings situated in NZS 3604 Wind Zones up to, and including, Very High.
- 7.4 Additional framing may be required at soffits, internal and external corners and window and door openings for the support and fixing of the SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System.
- 7.5 Timber wall framing behind where weatherboards are joined over a stud must be nominal 50 mm thickness (i.e. 45 mm minimum finished thickness).
- 7.6 Timber wall framing must have a maximum moisture content of 20% at the time of the cladding application and a maximum moisture content of 18% before the weatherboards are painted.

#### General

- 8.1 The ground clearance to finished floor levels as set out in NZS 3604 must be adhered to at all times. At ground level paved surfaces, such as footpaths, must be kept clear of the bottom edge of the cladding system by a minimum of 100 mm, and unpaved surfaces by 175 mm in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Table 18.
- 8.2 At balcony, deck or roof/wall junctions, the bottom edge of the SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System must be kept above the top surface of any adjacent roof flashing by a minimum of 35 mm in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.3.
- 8.3 All external walls of buildings must have barriers to airflow in the form of interior linings with all joints stopped for Wind Zones up to, and including, Very High. Unlined gables and walls must incorporate a rigid wall underlay or an air barrier which meets the requirements of NZBC Acceptable Solution E2/AS1, Table 23. For attached garages, wall underlays must be selected in accordance with NZBC Acceptable Solution E2/AS1, Paragraph 9.1.3.4.
- 8.4 Where the system abuts other cladding systems, designers must detail the junction to meet their own requirements and the performance requirements of the NZBC. Some guidance is given within the Technical Literature. Details not included within the Technical Literature have not been assessed and are outside the scope of this Appraisal.



#### Structure

#### Mass

9.1 The mass of the SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System is approximately 15 kg/m<sup>2</sup> at equilibrium moisture content. The system is therefore considered a lightweight cladding in terms of NZS 3604.

#### Impact Resistance

9.2 The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System has good resistance to impact loads likely to be encountered in normal residential use. The likelihood of impact damage to the system when used in light commercial situations should be considered at the design stage, and appropriate protection such as the installation of bollards and barriers should be considered for vulnerable areas.

#### Wind Zones

9.3 The SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System is suitable for use in all NZS 3604 Wind Zones up to, and including, Very High where buildings are designed to meet the requirements of NZBC Acceptable Solution E2/AS1 Paragraph 1.1.

#### Durability

10.1 The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System meets the performance requirements of NZBC Clause B2.3.1 (b) 15 years for the SmartClad™ weatherboards and flashings, and the performance requirements of NZBC Clause B2.3.1 (c) 5 years for the exterior paint system.

#### Serviceable Life

- 10.2 The SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System installations are expected to have a serviceable life of at least 50 years provided the system is maintained in accordance with this Appraisal, and the SmartClad<sup>™</sup> Bevelback weatherboards and fixings are continuously protected by a weathertight coating and remain dry in service. For the SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System to achieve a serviceable life of 50 years, it must be painted as soon as practicable, following weatherboard and trim installation.
- 10.3 Coastal locations can be very corrosive to fasteners, especially locations within distances of up to 500 m from the sea including harbours, or 100 m from tidal estuaries and sheltered inlets, and otherwise as shown in NZS 3604, Figure 4.2. These coastal locations are defined in NZS 3604 as Zone D. To achieve a 50 year serviceable life in Zone D, SmartClad™ Bevelback weatherboards at scarf joints, and where conventional nail fixing is required must be fixed with stainless steel or protected hot-dip galvanised steel fasteners. Fasteners outside Zone D may be hot-dip galvanised steel.
- 10.4 Microclimatic conditions, including geothermal hot spots, industrial contamination and corrosive atmospheres, and contamination from agricultural chemicals or fertilisers can convert mildly corrosive atmosphere into aggressive environments for fasteners. The fixing of SmartClad™ Bevelback weatherboards at scarf joints, and where conventional nail fixing is required in areas subject to microclimatic conditions requires specific design in accordance with NZS 3604, Paragraph 4.2.4, and is outside the scope of this Appraisal.

#### Maintenance

- 11.1 Regular maintenance is essential to ensure the performance requirements of the NZBC are continually met and to ensure the maximum serviceability of the system.
- 11.2 Regular cleaning (at least annually) of the paint coating is required to remove grime, dirt and organic growth and to maximise the life and appearance of the coating. Grime may be removed by brushing with a soft brush, warm water and detergent. Paint systems must be recoated at approximately 7–10 yearly intervals in accordance with the paint manufacturer's instructions.



- 11.3 Annual inspections must be made to ensure that all aspects of the cladding system, including the paint coating system, flashings and any sealed joints remain in a weatherproof condition. Any damaged areas or areas showing signs of deterioration which would allow water ingress must be repaired immediately. Sealant and paint coatings must be repaired in accordance with the relevant manufacturer's instructions.
- 11.4 Minimum ground clearances as set out in this Appraisal and the Technical Literature must be maintained at all times during the life of the system. (*Note: Failure to adhere to the minimum ground clearances given in this Appraisal and the Technical Literature will adversely affect the long term durability of the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System.*)

## **Prevention of Fire Occurring**

12.1 Separation or protection must be provided to the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System from heat sources such as fireplaces, heating appliances and chimneys. Part 7 of NZBC Verification Method C/VM1 and Acceptable Solution C/AS1, and NZBC Acceptable Solution C/AS2 provide methods for separation and protection of combustible materials from heat sources.

### **Control of External Fire Spread**

#### Vertical Fire Spread

13.1 This Appraisal only covers buildings 10 m or less in height. NZBC Functional Requirement C3.2 identifies that external vertical fire spread to upper floors only needs be considered for buildings with a building height greater than 10 m. Control of external vertical fire spread is therefore outside the scope of this Appraisal.

#### Horizontal Fire Spread

- 13.2 The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System has not been assessed for a peak heat release or total heat released rating and therefore cannot be used within 1 m of the relevant boundary or on Risk Group SI Buildings.
- 13.3 Refer to NZBC Acceptable Solutions C/AS1 and C/AS2 and Verification Method C/VM2 for fire resistance rating and control of external fire spread requirements for external walls.

#### **External Moisture**

- 14.1 The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System, when installed in accordance with this Appraisal and the Technical Literature, will prevent the penetration of moisture that could cause undue dampness or damage to building elements.
- 14.2 The SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System allows excess moisture present at the completion of construction to be dissipated without permanent damage to building elements to meet code compliance with NZBC Clause E2.3.6.
- 14.3 The details given in the Technical Literature for weather sealing are based on the principle of having a first and second line of defence against moisture entry for all joints, penetrations and junctions. The ingress of moisture must be excluded by detailing joinery and wall interfaces as shown in the Technical Literature. Weathertightness details that are developed by the designer are outside the scope of this Appraisal and are the responsibility of the designer for compliance with the NZBC.

#### **Internal Moisture**

#### Water Vapour

15.1 The SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System is not a barrier to the passage of water vapour, and when installed in accordance with this Appraisal, will not create a risk of moisture damage resulting from condensation.



# **Installation Information**

## Installation Skill Level Requirement

16.1 All design and building work must be carried out in accordance with the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System Technical Literature and this Appraisal by competent and experienced tradespersons conversant with the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System. Where the work involves Restricted Building Work (RBW) this must be completed by, or under the supervision of, a Licensed Building Practitioner (LBP) with the relevant License Class.

### SmartClad<sup>™</sup> System Installation

#### Wall Underlay and Flexible Sill and Jamb Tape Installation

17.1 The selected wall underlay and flexible sill and jamb tape system must be installed by the building contractor in accordance with the underlay and tape manufacturer's instructions prior to the installation of the rest of the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System. Flexible wall underlay must be installed horizontally and be continuous around corners. Underlay must be lapped 75 mm minimum at horizontal joints and 150 mm minimum over studs at vertical joints. Generic rigid wall underlay materials must be installed in accordance with NZBC Acceptable Solution E2/AS1 and be overlaid with a flexible wall underlay. Proprietary systems shall be installed in accordance with the manufacturer's instructions. Particular attention must be paid to the installation of the building underlay and sill and jamb tapes around window and door openings to ensure a continuous seal is achieved and all exposed wall framing in the opening is protected.

#### SmartClad™ Bevelback Weatherboard Installation

- 17.2 SmartClad<sup>™</sup> weatherboards may be cut on-site by power or hand saw. Holes and cut-outs may be formed by using a hole saw.
- 17.3 SmartClad<sup>™</sup> weatherboards must be dry prior to installation. Before the weatherboards are installed, cut ends must be sealed with two coats of premium timber primer.
- 17.4 Before the weatherboards are installed, the corner detail must be prepared to suit the selected option, i.e. external box corner or mitred corner. The necessary flashings must be installed before commencing weatherboard fixing.
- 17.5 SmartClad<sup>™</sup> weatherboards or SmartClad<sup>™</sup> Starter Boards must be installed starting at the bottom of the wall. The bottom course of weatherboards or the SmartClad<sup>™</sup> Starter Boards must overhang the bottom plate by a minimum of 50 mm. A tilting fillet is required if SmartClad<sup>™</sup> weatherboards are used for the bottom course.
- 17.6 The weatherboards are fixed at the top with the SmartClip<sup>™</sup> fitted into the face groove and screw fixed to studs. The subsequent board clips onto the front face of the SmartClip<sup>™</sup> by slotting into the groove at the rear of the board. SmartClad<sup>™</sup> weatherboards must be overlapped by a minimum of 30 mm. A SmartClad<sup>™</sup> Pre-scribed Scriber or storey rod should be used to ensure the weatherboards are accurately set out.
- 17.7 Each weatherboard is fixed with a SmartClip™ and screw at every stud. Nail fixing is generally required for the top boards. Where nail fixing it used, the nail must be located 40 mm above the bottom edge of the overlap board and be punched a maximum of 2 mm below the surface of the board. Start fixing the weatherboards at the middle of their length and work outwards to the ends. Pre-drill all fixings within 50 mm of the end of the board.
- 17.8 Fix weatherboards in full lengths where possible. Where joints are unavoidable, scarf the weatherboard at 45° over a stud and fix with one fixing through the overlapping board. Prime the cut ends of all scarf joints with two coats of premium timber primer before fixing. Alternatively SmartClad™ Joint Soakers may be used.



#### Aluminium Joinery Installation

- 17.9 Aluminium joinery and associated head flashings must be installed by the building contractor in accordance with the Technical Literature. A 7.5–10 mm nominal gap must be left between the joinery reveal and the wall framing so a PEF rod and air seal can be installed after the joinery has been secured in place.
- 17.10 After installing the window and door joinery, SmartClad<sup>™</sup> facings, plant-on sills and scribers are installed in accordance with the Technical Literature to provide additional weatherproofing for the joinery/weatherboard junction.

#### Finishing

17.11 The paint coating manufacturer's instructions must be followed at all times for application of the paint finish. SmartClad™ Bevelback weatherboards must be painted as soon as practicable following fixing and must be clean and dry before commencing. If SmartClad™ weatherboards are exposed to the weather for more than 60 days they must be reprimed with one coat of alkyd primer prior to the application of the finishing coats. The recommended drying time between coats and the temperature limitations for application must be followed.

#### Inspection

17.12 The Technical Literature must be referred to during the inspection of the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System installations.

### **Health and Safety**

- 18.1 Cutting of SmartClad<sup>™</sup> weatherboards must be carried out in well ventilated areas and eye and hearing protection must be worn.
- 18.2 Safe use and handling procedures for the components that make up the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System are provided in the relevant manufacturer's Technical Literature.

## **Basis of Appraisal**

The following is a summary of the technical investigations carried out:

#### Tests

- 19.1 The following testing has been completed by BRANZ:
  - BRANZ expert opinion on NZBC E2 code compliance for the SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System was based on testing and evaluation of all details within the scope and as stated within this Appraisal. The details contained within the Technical Literature have been reviewed, and an opinion has been given by BRANZ technical experts that the system will meet the performance levels of NZBC Acceptable Solution E2/AS1 for direct-fixed weatherboard claddings.
  - From suction tests in a 2.4 m square pressure box, BRANZ determined design wind suction pressures, and by comparing these pressures with AS/NZS 1170 pressure coefficients, the fixing requirements were determined for timber framed walls.

## **Other Investigations**

- 20.1 Structural and durability opinions have been provided by BRANZ technical experts.
- 20.2 The performance and testing of bevelback weatherboard wall cladding products in New Zealand and Australia has been considered, including the structural and weathertightness performance, durability and non-hazardous nature.
- 20.3 Site inspections have been carried out by BRANZ to assess the practicability of installation and to examine completed installations.
- 20.4 The Technical Literature for the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System has been examined by BRANZ and found to be satisfactory.



### Quality

- 21.1 The manufacture of SmartClad<sup>™</sup> Bevelback weatherboards and timber accessories has been examined by BRANZ, including methods adopted for quality control. Details regarding the quality and composition of the materials used were obtained by BRANZ and found to be satisfactory.
- 21.2 The quality of materials, components and accessories supplied by PurePine Mouldings Limited is the responsibility of PurePine Mouldings Limited. The quality control system for the finger jointing of PurePine Mouldings Limited weatherboards and accessories has been assessed by BRANZ and found to be satisfactory.
- 21.3 The quality control system for the timber treatment of SmartClad™ weatherboards and accessories has been assessed and registered as meeting the requirements of the WOODmark® Quality Assurance Programme for treated timber by the New Zealand Timber Preservation Council Inc., Licence Number 132.
- 21.4 Quality of installation on-site of components and accessories supplied by PurePine Mouldings Limited and the building contractor is the responsibility of the installer.
- 21.5 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of framing systems and joinery, building underlays, flashing tapes, air seals and the SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System in accordance with the instructions of PurePine Mouldings Limited.
- 21.6 Building owners are responsible for the maintenance of the SmartClad™ Bevelback Weatherboard Direct Fixed Cladding System in accordance with the instructions of PurePine Mouldings Limited.

## Sources of Information

- AS 3730 Guide to the properties of paints for buildings.
- AS/NZS 1170:2002 Structural design actions.
- AS/NZS 1491:1996 Finger jointed structural timber.
- AS/NZS 4534:2006 Zinc and zinc/aluminium-alloy coatings on steel wire.
- AS/NZS 4680:2006 Hot-dip galvanized (zinc) coatings on fabricated ferrous articles.
- BRANZ Bulletin Number 411, April 2001, Recommended timber cladding profiles.
- NZS 3603:1993 Timber Structures Standard.
- NZS 3604:2011 Timber-framed buildings.
- NZS 4211:2008 Specification for performance of windows.
- Ministry of Business, Innovation and Employment Record of amendments Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.





In the opinion of BRANZ, SmartClad<sup>™</sup> Bevelback Weatherboard Direct Fixed Cladding System is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **PurePine Mouldings Limited**, and is valid until further notice, subject to the Conditions of Appraisal.

# **Conditions of Appraisal**

- 1. This Appraisal:
  - a) relates only to the product as described herein;
  - b) must be read, considered and used in full together with the Technical Literature;
  - c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
  - d] is copyright of BRANZ.
- 2. PurePine Mouldings Limited:
  - a) continues to have the product reviewed by BRANZ;
  - b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
  - c) abides by the BRANZ Appraisals Services Terms and Conditions;
  - d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
- 3. BRANZ makes no representation or warranty as to:
  - a) the nature of individual examples of, batches of, or individual installations of the product, including methods and workmanship;
  - b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
  - c) any guarantee or warranty offered by PurePine Mouldings Limited.
- 4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
- 5. BRANZ provides no certification, guarantee, indemnity or warranty, to PurePine Mouldings Limited or any third party.

For BRANZ

**Chelydra Percy** Chief Executive Date of Issue: 14 June 2022